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Masashi Hoshino

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BEKELE, MEKONEN T

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/541,371

Applicant(s)

HOSHINO ET AL.

Examiner

MEKONEN BEKELE

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-15 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 05 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 07/05/2005
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Inventor's Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-15 are pending in this application.

Information Disclosure Statement

- 2 The information disclosure statements field on 07/05/2005 is in compliance with the provisions of 37 CFR 1.97, and has been considered and copies are enclosed with this Office Action

Priority

3. Acknowledgement is made of application's claim for foreign priority under 35 U.S.C. 119 (a)-(d) based on the Japanese patent application No. 2003-5650 filed on 01/14/2003. The certified copy has been filed in parent application No. 10541371, filed 02/03/2006

Drawings

4. The Drawings filed on 07/05/2005 are accepted for examination.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35U.S.C.102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 5 Claims 10, 11, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated *Kato, Motoki (hereafter Kato), European Patent Application Number: 01304794.9, published on 02/27/2002*

As to claim 11, *Kato* teaches an image processor (**Abstract: Image coding apparatus and method, image decoding apparatus and method,**) comprising:

a received data-separating unit (**Fig. 3 element 12, the demultiplexer**) operable to separate received data into two different pieces of encoded data and graphics data, thereby providing the encoded data and the graphics data (**page 6 [0074], the partial transport stream inputted in the demultiplexer 12 is separated into a video stream and other streams (audio, still picture, character graphics, and multimedia coding data for example. The video stream data corresponds to the encoded data, and the character graphics data corresponds to the graphics data), when the received data includes the encoded data and the graphics data (the partial transport stream data includes both encoded video stream(encoded) data and character graphics data), said received data-separating unit being operable to provide the encoded data when the received data includes the encoded data, but not the graphics data(Fig. 3, Fig. 3 illustrates the demultiplexer 12 provide a video stream data (encoded data) to the decoder 14, but the demultiplexed12 does not provide the graphic characteristic data to the decoder 14);**

a decoding unit operable to decode the encoded data from said received data-separating unit, thereby providing decoded data(**Fig. 3 element 14, the video stream data of the demultiplexer 12 is decoded through the decoder 14);**

a graphics-generating unit (**Fig. 25 element 35, the character graphics/still picture decoder 35)** operable to generate graphics image data based on the graphics data from said received data-separating unit, thereby providing the graphics image data (**page 11, [0159], the character graphics/still picture decoder 35 decodes the inputted data stream such as**

character graphics, text, and still picture and outputs the decoded character graphics data, text data. The inputted data stream is received from the demultiplexer 12);

an image-blending unit (**Fig. 25 element 36, the synthesizing block 36**) operable to blend a plurality of images with one another to provide blended image data(**Fig.25 element 36 shows the synthesizing block 36 receives multiply data and output a video data. The blended image data corresponds to the video data outputted by the synthesizing block 36**), the plurality of images being represented by at least two pieces of data selected from among the decoded data from said decoding unit (**Fig.25 element 34, the out put of Av decoder**), the graphics image data from said graphics-generating unit (**Fig.25 element 35, the output of the characteristic graphic/ still picture decoder**), and image data from outside of said image processor;

an encoding unit (**Fig.3 element 15, the encoder 15**) operable to individually encode the image data from the outside of said image processor (**Fig.3 Video coding control information, Bit Rate, Picture frame etc)** and the decoded data from said decoding unit(**Fig. 3 element 14, the output of the decoder 14 data is encoded by the encoder15**), thereby providing encoded data(**Fig. 3 element 15, the encoder receives the video data from the decoder 14 and the video coding control information encode them output as a video stream(encoded) data**);

a multiplexing unit (**Fig. 3 element 16, he Multiplexer**) operable to multiplex the encoded data (**Fig. 15 element 15, the video stream outputted by the Encoder15**) from said encoding unit (**Fig. 3 element 15, the encoder**) with the graphics data (**Fig.3 element 12 the out put of the demultiplexer12**) from said received data-separating unit (**Fig.3 element 12, the demultiplexer12**), thereby providing multiplexed data (**Fig. 15 element 16, the output of the Multiplexer**);

a storing unit operable to store the multiplexed data (**Fig.3 element 23, the buffer**) from said multiplexing unit (**Fig.3 element 23, the output of multiplexed data is stored in the buffer 23**);

a stored data-separating unit (**Fig.1A, character graphics data unit and text data unit**) operable to separate the multiplexed data from said storing unit into two different pieces of the encoded data (**Fig.1A, text data**) and the graphics data (**Fig.1A, character graphics data**), thereby providing the encoded data and the graphics data separately (**Fig.1B, in Fig. 1B the character graphic data and the text data are displayed separately**).

As to claim 10, *Kato* teaches an encoding unit (**Fig. 3 element 12, the demultiplexer**) operable to individually encode graphic the image data (**Fig. 3, the output of the demultiplexer shows the demultiplexer separately encode the pictorial data character graphic data, etc.**) from said graphic- generating unit (**Fig. 3 element 10, the selector, the selector contains both Video stream data, audio, still Pictorial data**).

Regarding the remaining section of claim limitation, all claimed limitations are set forth and rejected as per discussion for claim 11.

As to claim 14, *Kato* teaches an image processor (**Abstract: Image coding apparatus and method, Image decoding apparatus and method,**) comprising:
a decoding unit (**Fig. 3 element 14, the decoder14**) operable to decode entered encoded data, thereby producing decoded data (**Fig. 3 element 14, the video stream data of the demultiplexer 12 is decoded through the decoder 14. The entered encoded data corresponds to the video stream data**);

an encoding unit (**Fig.3 element 15, the encoder 15**) operable to individually encode entered image data and the decoded data (**Fig.3 the encoder 15 encode the Video coding control information, Bit Rate, Picture frame and the video data**);

a storing unit operable (**Fig.3 element 23, the buffer**) to store the individually encoded image data and the individually encoded decoded data (**Fig.3 element 23, the buffer stores the encoded Video coding control information, Bit Rate, Picture frame and the video data**).

Regarding claim 15, all claimed limitations are set forth and rejected as per discussion for claim 14.

Claim Rejections - 35 USC § 103

The following is a quotation of the 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the difference between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-9, 12 and 13 are rejected under 35 U.S.C 103(a) as being unpatentable over *Kato, Motoki (hereafter Kato)*, *European Patent Application Number: 01304794.9, published on 02/27/2002*, in view of *Lavallee Pierre (hereafter Lavallee)*, US Patent No. US 6215904 B1, published on Apr. 10, 2000.

As to claim 1, *Kato* teaches Data-transceiving equipment (**Abstract: Image coding apparatus and method, image decoding apparatus and method,**) comprising:

a received data-separating unit (**Fig. 3 element 12, the demultiplexer**) operable to separate received data into two different pieces of encoded data and graphics data, thereby providing the encoded data and the graphics data (**page 6 [0074], the partial transport stream inputted in the demultiplexer 12 is separated into a video stream and other streams (audio, still picture, character graphics, and multimedia coding data for example. The video stream data corresponds to the encoded data, and the character graphics data corresponds to the graphics data), when the received data includes the encoded data and the graphics data (the partial transport stream data includes both encoded video stream(encoded) data and character graphics data), said received data-separating unit being operable to provide the encoded data when the received data includes the encoded data, but not the graphics data(Fig. 3, Fig. 3 illustrates the demultiplexer 12 provide a video stream data (encoded data) to the decoder 14, but the demultiplexed12 does not provide the graphic characteristic data to the decoder 14);**

a decoding unit operable to decode the encoded data from said received data-separating unit, thereby providing decoded data(**Fig. 3 element 14, the video stream data of the demultiplexer 12 is decoded through the decoder 14);**

a graphics-generating unit (**Fig. 25 element 35, the character graphics/still picture decoder 35**) operable to generate graphics image data based on the graphics data from said received data-separating unit, thereby providing the graphics image data (**page 11, [0159], the character graphics/still picture decoder 35 decodes the inputted data stream such as character graphics, text, and still picture and outputs the decoded character graphics data, text data. The inputted data stream is received from the demultiplexer 12);**

an image-blending unit (**Fig. 25 element 36, the synthesizing block 36**) operable to blend a plurality of images with one another to provide blended image data(**Fig.25 element 36**

shows the synthesizing block 36 receives multiply data and output a video data. The blended image data **corresponds to the video data outputted by the synthesizing block 36**), the plurality of images being represented by at least two pieces of data selected from among the decoded data from said decoding unit (**Fig.25 element 34, the out put of Av decoder**), the graphics image data from said graphics-generating unit (**Fig.25 element 35, the output of the characteristic graphic/ still picture decoder**);

an image-displaying unit operable to display a blended image based on the blended image data from said image-blending unit (**Fig.22 Video- Display Unit**)

an encoding unit (**Fig.3 element 15, the encoder 15**) operable to individually encode the decoded data from said decoding unit (**Fig. 3 element 14, the output of the decoder 14 data is encoded by the encoding unit 15**) and the graphics image data from said graphics-generating (**Fig.3 element 12: the Demultiplexer decode a graphic data**);

a storing unit (**Fig. 3 element 23, the buffer**) operable to store the encoded decoded data (**Fig. 3 element 15, the video stream data**), and the encoded graphics image data (**Fig.3 element 3, the character graphic data and the video stream are stored in the buffer 23**)

However, it is noted that *Kato* does not specifically teach “an image input unit operable to enter image data;

an encoding unit operable to individually encode the image data from said image input unit;

a storing unit operable to store the encoded image data”

On the other hand the apparatus and method for selecting encoding schemes based upon image content of *Lavallee* teaches an image input unit(**Fig.1 element 110, the scanner**)

operable to enter image data (**Abstract, an image scanner apparatus scans a document and provides image data in digital form**);

an encoding unit (Fig.1 elements **170 and 140: text/line graphic data encoder 170 and pictorial data encoder140**) operable to individually encode the image data (**Fig. 1 element 140, pictorial data encoder**) from said image input unit.

a storing unit (**Fig. 1 element 190, the memory**) operable to store the encoded image data (**col.4 lines 48-52, the memory unit stores the image data encoded by encoder 140 in memory unit190**).

It would have been obvious to one the ordinary skill in the art at the time of applicant's invention was made to incorporate the apparatus and method for selecting encoding schemes based upon image content of Lavallee into the Image coding apparatus and method, image decoding apparatus and method, and recording medium of Kato, because that would have allowed user of Kato to detects characteristics of the image data and compresses the image data using parallel compressors, each employing a different encoding scheme (**Abstract**). Further the encoding apparatus of Lavallee would have allowed user of Kato to select compressed image data encoded by one of the compressors in accordance with the detected characteristics and stores the selected data (**Abstract**).

As to claim 2, *Kato* teaches Data-transceiving equipment (**Abstract: Image coding apparatus and method, image decoding apparatus and method,**) comprising:
a received data-separating unit (**Fig. 3 element 12, the demultiplexer**) operable to separate received data into two different pieces of encoded data and graphics data, thereby providing the encoded data and the graphics data (**page 6 [0074], the partial transport stream inputted in**

the demultiplexer 12 is separated into a video stream and other streams (audio, still picture, character graphics, and multimedia coding data for example. The video stream data corresponds to the encoded data, and the character graphics data corresponds to the graphics data), when the received data includes the encoded data and the graphics data (the partial transport stream data includes both encoded video stream(encoded) data and character graphics data), said received data-separating unit being operable to provide the encoded data when the received data includes the encoded data, but not the graphics data(Fig. 3, Fig. 3 illustrates the demultiplexer 12 provide a video stream data (encoded data) to the decoder 14, but the demultiplexed12 does not provide the graphic characteristic data to the decoder 14);

a decoding unit operable to decode the encoded data from said received data-separating unit, thereby providing decoded data(Fig. 3 element 14, the video stream data of the demultiplexer 12 is decoded through the decoder 14);

a graphics-generating unit (Fig. 25 element 35, the character graphics/still picture decoder 35) operable to generate graphics image data based on the graphics data from said received data-separating unit, thereby providing the graphics image data (page 11, [0159], the character graphics/still picture decoder 35 decodes the inputted data stream such as character graphics, text, and still picture and outputs the decoded character graphics data, text data. The inputted data stream is received from the demultiplexer 12);

an image-blending unit (Fig. 25 element 36, the synthesizing block 36) operable to blend a plurality of images with one another to provide blended image data(Fig.25 element 36 shows the synthesizing block 36 receives multiply data and output a video data. The blended image data corresponds to the video data outputted by the synthesizing block 36), the plurality of images being represented by at least two pieces of data selected from

among the decoded data from said decoding unit (**Fig.25 element 34, the out put of Av decoder**), the graphics image data from said graphics-generating unit (**Fig.25 element 35, the output of the characteristic graphic/ still picture decoder**);

an encoding unit (**Fig.3 element 15, the encoder 15**) operable to individually encode the decoded data from said decoding unit(**Fig. 3 element 14, the output of the decoder 14 data is encoded by the encoding unit 15**)

a storing unit (**Fig. 3 element 23, the buffer**) operable to store the encoded decoded data (**Fig. 3 element 15, the video stream data**),and the encoded graphics image data(**Fig.3 element 3, the character graphic data and the video stream are stored in the buffer 23**),

an image-displaying unit operable to display a blended image based on the blended image data from said image-blending unit (**Fig.22 Video- Display Unit**)

a multiplexing unit (**Fig. 3 element 16, he Multiplexer**) operable to multiplex the encoded data(**Fig. 15 element 15, the video stream outputted by the Encoder15**) from said encoding unit(**Fig. 3 element 15, the encoder**) with the graphics data (**Fig.3 element 12 the out put of the demultiplexer12**) from said received data-separating unit(**Fig.3 element 12, the demultiplexer12**), thereby providing multiplexed data (**Fig. 15 element 16, the output of the Multiplexer**);

a storing unit operable to store the multiplexed data(**Fig.3 element 23, the buffer**) from said multiplexing unit (**Fig.3 element 23, the output of multiplexed data is stored in the buffer 23**);

a stored data-separating unit (**Fig.1A, character graphics data unit and text data unit**) operable to separate the multiplexed data from said storing unit into two different pieces of the encoded data (**Fig.1A, text data**) and the graphics data (**Fig.1A, character graphics data**),

thereby providing the encoded data and the graphics data separately (**Fig.1B, in Fig. 1B the character graphic data and the text data are displayed separately**).

However, it is noted that *Kato* does not specifically teach "an image input unit operable to enter image data;

an encoding unit operable to individually encode the image data from said image input unit;"

On the other hand the apparatus and method for selecting encoding schemes based upon image content of Lavallee teaches an image input unit(**Fig.1 element 110, the scanner**) operable to enter image data (**Abstract, an image scanner apparatus scans a document and provides image data in digital form**);

an encoding unit(**Fig.1 element 140, pictorial data encoder 140**) operable to individually encode the image data(**Fig. 1 element 140, pictorial data encoder**) from said image input unit;

a storing unit (**Fig. 1 element 190, the memory**) operable to store the encoded image data (**col.4 lines 48-52, the memory unit 190 stores the encoded pictorial data encoded by Pictorial data encoder140**).

It would have been obvious to one the ordinary skill in the art at the time of applicant's invention was made to incorporate the apparatus and method for selecting encoding schemes based upon image content of Lavallee into the Image coding apparatus and method, image decoding apparatus and method, and recording medium of *Kato*, because that would have allowed user of *Kato* to detects characteristics of the image data and compresses the image data using parallel compressors, each employing a different encoding scheme (**Abstract**).

Further the encoding apparatus of Lavalée would have allowed user of Kato to select compressed image data encoded by one of the compressors in accordance with the detected characteristics and stores the selected data (**Abstract**).

As to claim 3, *Kato* teach a control unit (**abstract: the coding controller controls the encoding operation of an encoder**);

storing unit to store the encoded graphics image data from said encoding unit (**Fig.3 element 23, the buffer**),

Wherein, as to the graphics image a second mode allows said storing unit to store the encoded graphics image data from said encoding unit(**Fig.21 element 35, Graphics Picture data outputted by decoder 35 store in the Buffer (Fig. 23 element 23)**).

However it is noted that *Kato* does not specifically teaches

"a control unit,

wherein, as to a graphics image, a first mode allows said storing unit to store the graphics data that underlies the graphics image, and

wherein a switch over between the first and second modes is realized in accordance with instructions from said control unit;" **although *Kato* suggest the coding controller controls the encoding operation of an encoder on the basis of the inputted information and outputs video coding control information to a coding block on the basis of video coding control information (Abstract)**.

On the other hand Lavalée teaches a control unit (**Fig.1 element 180: the Controller Unit**),

wherein, as to a graphics image (**Fig. 1 element 140, the output of the pictorial data Encode and encoded data the pictorial encoded data**), a first mode (**Fig. 1 Mode Control line of the control unit**) allows said storing unit to store the graphics data that underlies the graphics image (**Fig. 1 element 140, the pictorial encoded data are stored in the memory 190 according to the control unit command**),

wherein a switch over between the first and second modes is realized in accordance with instructions from said control unit (**col.4 lines 18-30, Control unit 180 receives the encoded data from encoder 140 and encoder 170 and stores the encoded data from one of the encoders in memory 190 in accordance with the mode to which control unit 180 is set. Further, the control unit 180 can operate in one of three selectable modes: a user selection mode, an auto line mode, and an auto area mode. When control unit 180 is set to the user selection mode, control unit 180 stores compressed image data in accordance with settings specified by a user. Thus, it is obvious to set up the controller in order two switches between two or more different mode based on the control its control signals**).

As to claim 4, *Kato* teaches Data-transceiving equipment (**Abstract: Image coding apparatus and method, image decoding apparatus and method**), comprising:

a received data-separating unit (**Fig. 3 element 12, the demultiplexer**) operable to separate received data into two different pieces of encoded data and graphics data, thereby providing the encoded data and the graphics data (**page 6 [0074], the partial transport stream inputted in the demultiplexer 12 is separated into a video stream and other streams (audio, still picture, character graphics, and multimedia coding data for example. The video stream data corresponds to the encoded data, and the character graphics data**

corresponds to the graphics data), when the received data includes the encoded data and the graphics data (the partial transport stream data includes both encoded video stream(encoded) data and character graphics data), said received data- separating unit being operable to provide the encoded data when the received data includes the encoded data, but not the graphics data(Fig. 3, Fig. 3 illustrates the demultiplexer 12 provide a video stream data (encoded data) to the decoder 14, but the demultiplexed12 does not provide the graphic characteristic data to the decoder 14);

a decoding unit operable to decode the encoded data from said received data- separating unit, thereby providing decoded data(Fig. 3 element 14, the video stream data of the demultiplexer 12 is decoded through the decoder 14);

a graphics-generating unit (Fig. 25 element 35, the character graphics/still picture decoder 35) operable to generate graphics image data based on the graphics data from said received data-separating unit, thereby providing the graphics image data(page 11, [0159], the character graphics/still picture decoder 35 decodes the inputted data stream such as character graphics, text, and still picture and outputs the decoded character graphics data, still picture data. The inputted data stream is received from the demultiplexer 12);

an image-blending unit (Fig. 25 element 36, the synthesizing block 36) operable to blend a plurality of images with one another to provide blended image data(Fig.25 element 36 shows the synthesizing block 36 receives multiply data and output a video data. The blended image data corresponds to the video data outputted by the synthesizing block 36), the plurality of images being represented by at least two pieces of data selected from among the decoded data from said decoding unit (Fig.25 element 34, the out put of Av decoder), the graphics image data from said graphics-generating unit(Fig.25 element 35, the

output of the characteristic graphic/ still picture decoder), and image data from outside of said image processor;

an image-displaying unit operable to display a blended image based on the blended image data from said image-blending unit (Fig.22 Video- Display Unit);

However it is noted that *Kato* does not specifically teach "an image input unit operable to enter image data;

a selecting unit operable to select, in response to a control signal, data from among the decoded data from said decoding unit, the graphics image data from said graphics-generating unit, and the image data from said image input unit, thereby providing selected data;

an encoding unit operable to encode the selected data from said selecting unit, thereby providing encoded data; and

a storing unit operable to store the encoded data from said encoding unit, wherein said encoding unit individually encodes two or greater pieces of data selected by said selecting unit when said selecting unit selects the two or greater pieces of data" **although XXX suggest the coding controller controls the encoding operation of an encoder on the basis of the inputted information and outputs video coding control information to a coding block on the basis of video coding control information (Abstract).**

On the other hand the apparatus and method for selecting encoding schemes based upon image content of Lavallee teaches an image input unit operable to enter image data (Fig. 1 element 110) ;

a selecting unit operable to select, in response to a control signal(**Fig. 1 element 190, Fig.3 element 330, a control unit includes a selecting unit(Fig.3 element 330) that select data based on the control signal (see Fig .1 elements 150 and 130)**), data from among the decoded data from said decoding unit, the graphics image data from said graphics-generating unit (**Fig. 1 element 160, text/line graphic data processing module**), and the image data from said image input unit (**Fig. 1 element 130, a pictorial data processing module 130**), hereby providing selected data(**Fig. 3 element 330, the control selecting unit select the text/line graphic data and the a pictorial data based upon the detected image characteristic**);

an encoding unit operable to encode the selected data from said selecting unit, thereby providing encoded data (**Fig. 1 elements 140 and 170, the pictorial data encoder 140 and the text data encoder encode text/line graphic data and the a pictorial and provide encoded data**);

a storing unit (**Fig.1 element 190, a memory unit**)operable to store the encoded data from said encoding unit wherein said encoding unit individually encodes two or greater pieces of data selected by said selecting unit when said selecting unit selects the two or greater pieces of data(**col. 4 lines 18-25, Control unit 180 receives the encoded data from encoder 140 and encoder 170 and stores the encoded data from one of the encoders in memory 190 in accordance with the mode to which control unit 180 is set**).

It would have been obvious to one the ordinary skill in the art at the time of applicant's invention was made to incorporate the apparatus and method for selecting encoding schemes based upon image content of Lavallee into the Image coding apparatus and method, image decoding apparatus and method, and recording medium of Kato, because that would have

allowed user of Kato to detects characteristics of the image data and compresses the image data using parallel compressors, each employing a different encoding scheme (**Abstract**). Further the encoding apparatus of Lavallee would have allowed user of Kato to select compressed image data encoded by one of the compressors in accordance with the detected characteristics and stores the selected data (**Abstract**).

As to claim 5, Kato teaches Data-transceiving equipment (**Abstract: Image coding apparatus and method, image decoding apparatus and method,**) comprising:

a received data-separating unit (**Fig. 3 element 12, the demultiplexer**) operable to separate received data into two different pieces of encoded data and graphics data, thereby providing the encoded data and the graphics data (**page 6 [0074], the partial transport stream inputted in the demultiplexer 12 is separated into a video stream and other streams (audio, still picture, character graphics, and multimedia coding data for example. The video stream data corresponds to the encoded data, and the character graphics data corresponds to the graphics data), when the received data includes the encoded data and the graphics data (the partial transport stream data includes both encoded video stream(encoded) data and character graphics data), said received data-separating unit being operable to provide the encoded data when the received data includes the encoded data, but not the graphics data(Fig. 3, Fig. 3 illustrates the demultiplexer 12 provide a video stream data (encoded data) to the decoder 14, but the demultiplexed12 does not provide the graphic characteristic data to the decoder 14);**

a decoding unit operable to decode the encoded data from said received data-separating unit, thereby providing decoded data(**Fig. 3 element 14, the video stream data of the demultiplexer 12 is decoded through the decoder 14);**

a graphics-generating unit (**Fig. 25 element 35, the character graphics/still picture decoder 35**) operable to generate graphics image data based on the graphics data from said received data-separating unit, thereby providing the graphics image data(**page 11, [0159], the character graphics/still picture decoder 35 decodes the inputted data stream such as character graphics, text, and still picture and outputs the decoded character graphics data, text data. The inputted data stream is received from the demultiplexer 12;**

an image-blending unit (**Fig. 25 element 36, the synthesizing block 36**) operable to blend a plurality of images with one another to provide blended image data(**Fig.25 element 36 shows the synthesizing block 36 receives multiply data and output a video data. The blended image data corresponds to the video data outputted by the synthesizing block 36**), the plurality of images being represented by at least two pieces of data selected from among the decoded data from said decoding unit (**Fig.25 element 34, the out put of Av decoder**), the graphics image data from said graphics-generating unit(**Fig.25 element 35, the output of the characteristic graphic/ still picture decoder**), and image data from outside of said image input unit;

an image-displaying unit operable to display a blended image based on the blended image data from said image-blending unit (**Fig.22 Video- Display Unit**);

a storing unit operable to store the multiplexed data(**Fig.3 element 23, the buffer**) from said multiplexing unit (**Fig.3 element 23, the output of multiplexed data is stored in the buffer 23**);

a stored data-separating unit (**Fig.1A, character graphics data unit and text data unit**) operable to separate the multiplexed data from said storing unit into two different pieces of the encoded data (**Fig.1A, text data**)and the graphics data(**Fig.1A, character graphics data**),

thereby providing the encoded data and the graphics data separately(**Fig.1B, in Fig. 1B the character graphic data and the text data are displayed separately**).

However it is noted that Kato does not specifically teach “an image input unit operable to enter image data;

a selecting unit operable to select, in response to a control signal, data from among the decoded data from said decoding unit, the graphics image data from said graphics-generating unit, and the image data from said image input unit, thereby providing selected data;

an encoding unit operable to encode the selected data from said selecting unit, thereby providing encoded data,

wherein said encoding unit individually encodes two or greater pieces of data selected by said selecting unit when said selecting unit selects the two or greater pieces of data, “**although Kato suggest the coding controller controls the encoding operation of an encoder on the basis of the inputted information and outputs video coding control information to a coding block on the basis of video coding control information (Abstract).**

On the other hand the apparatus and method for selecting encoding schemes based upon image content of Lavalée teaches an image input unit operable to enter image data(Fig. 1 element 110 the scanner)

a selecting unit operable to select, in response to a control signal(**Fig. 1 element 190, Fig.3 element 330, a control unit includes a selecting unit(Fig.3 element 330) that select data based on the control signal (see Fig .1 elements 150 and 130)**), data from among the decoded data from said decoding unit, the graphics image data from said graphics-generating unit (**Fig. 1 element 160, text/line graphic data processing module**), and the image data

from said image input unit (**Fig. 1 element 130, a pictorial data processing module 130**), hereby providing selected data(**Fig. 3 element 330, the control selecting unit select the text/line graphic data and the a pictorial data based upon the detected image characteristic**);

an encoding unit operable to encode the selected data from said selecting unit, thereby providing encoded data (**Fig. 1 elements 140 and 170, the pictorial data encoder 140 and the text data encoder encode text/line graphic data and the a pictorial and provide encoded data**);

wherein said encoding unit individually encodes two or greater pieces of data selected by said selecting unit when said selecting unit selects the two or greater pieces of data(**col. 4 lines 18-25, Control unit 180 receives the encoded data from encoder 140 and encoder 170 and stores the encoded data from one of the encoders in memory 190 in accordance with the mode to which control unit 180 is set**).

It would have been obvious to one the ordinary skill in the art at the time of applicant's invention was made to incorporate the apparatus and method for selecting encoding schemes based upon image content of Lavallee into the Image coding apparatus and method, image decoding apparatus and method, and recording medium of Kato, because that would have allowed user of Kato to detects characteristics of the image data and compresses the image data using parallel compressors, each employing a different encoding scheme (**Abstract**). Further the encoding apparatus of Lavallee would have allowed user of Kato to select compressed image data encoded by one of the compressors in accordance with the detected characteristics and stores the selected data (**Abstract**).

Regarding claim 6, all claimed limitations are set forth and rejected as per discussion for claim 3.

As to claim 7, Lavalley teaches the second mode allows or disallows said receiving data-separating unit to enter the graphics data into said multiplexing unit in response to instructions from said control unit (**Col. 4 lines 24-30, Control unit 180 receives the encoded data from encoder 140 and encoder 170 and stores the encoded data from one of the encoders in memory 190 in accordance with the mode to which control unit 180 set. Thus, the controller unit mode can be set based on the user selection**)

Regarding claim 8, all claimed limitations are set forth and rejected as per discussion for claims 1 and 3.

As to claim 9, Kato teaches said storing unit stores data related to the blended image displayed on said image-displaying unit (**Fig.22 B, the video Display unity**).

Regarding claim 12, all claimed limitations are set forth and rejected as per discussion for claims 1 and 5.

Regarding claim 13, all claimed limitations are set forth and rejected as per discussion for claims 1 and 5.

Conclusion

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Mekonen Bekele whose telephone number is 571-270-3915. The examiner can normally be reached on Monday -Friday from 8:00AM to 5:50 PM Eastern Time.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor AHMED SAMIR can be reached on (571)272-7413. The fax phone number for the organization where the application or proceeding is assigned is 571-237-8300. Information regarding the status of an application may be obtained from the patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished application is available through Privet PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217-919 (tool-free)

/MEKONEN BEKELE/
Examiner, Art Unit 2624
November 8, 2008

/Samir A. Ahmed/

Supervisory Patent Examiner, Art Unit 2624